

REMARKS

The applicants have considered the Office action dated March 20, 2008, and the references it cites. By way of this response claims 1-4, 6, 9-13, 16, 19-22, 24 and 26-29 have been amended. Accordingly, claims 1-32 are pending and at issue, of which claims 1, 9, 19, 26 and 29 are independent. It is respectfully submitted that all claims are fully supported by the originally-filed specification; no new matter has been added. In view of the foregoing amendments and the following remarks, it is respectfully submitted that the pending claims are in condition for allowance and favorable reconsideration is respectfully requested.

Request for Information under 37 C.F.R. § 1.105

The Office action includes a request for information under 37 C.F.R. § 1.105 concerning a document titled “Extensible Firmware Interface Specification” submitted with an information disclosure statement (IDS) filed on August 16, 2006. The request for information requires the applicants to identify the section or sections of the Extensible Firmware Interface (EFI) Specification which are believed to relate directly to the subject matter of the present application. The present application in ¶ [0015] describes using the EFI Application Program Interface (API) to implement message modules 108 and 122 to receive and transmit messages via a network connection. Network support is discussed in the cited EFI Specification at Section 15, titled “Protocols – Network Support.” Additionally, Section 11 of the EFI Specification discusses booting from a network device (see e.g. Section 11.2.3.5), with reference to the Load File Protocol (see e.g. Section 11.1) and the PXE Base Code Protocol (see e.g. Section 15.3). Furthermore, Section

15.5 discusses checking digital signatures against digital certificates for determining integrity and authorization. Thus, in response to the request for information under 37 C.F.R. § 1.105, Sections 11 and 15 of the EFI Specification are identified as being believed to be relevant to the present application.

Objection to the Specification: Abstract

The Office action objected to the specification of the present application under M.P.E.P. § 608.01(b) for having an Abstract reciting information already available within the title of the application. It is respectfully submitted that the original Abstract complied with the requirements of M.P.E.P. § 608.01(b) and, more importantly, 37 C.F.R. § 1.77(b). However, in the interest of moving prosecution of the application forward, the Abstract has been amended as suggested by the Office action to delete the first sentence containing text duplicative of the title of the invention. Accordingly, withdrawal of the objection to the Abstract under M.P.E.P. § 608.01(b) is respectfully requested.

Objection to the Specification: Summary of the Invention

The Office action also objected to the specification of the present application under M.P.E.P. § 608.01(b) for failing to include a Brief Summary of the Invention. The applicants respectfully submit that this objection is improper because neither M.P.E.P. § 608.01(b) nor the USPTO's own rules require that a summary of the invention be included in the specification.

M.P.E.P. § 608.01(b) is based on and expressly recites 37 CFR § 1.73, which states:

A brief summary of the invention indicating its nature and substance, which may include a statement of the object of the invention, should precede the detailed description. Such summary should, *when set forth*, be commensurate with the invention as claimed and any object recited should be that of the invention as claimed.

M.P.E.P. § 608.01(b) (citing 37 CFR § 1.73) (emphasis added).

Thus, 37 CFR § 1.73 and, by extension, M.P.E.P. § 608.01(b) *do not require* a summary of the invention because the language “when set forth,” on its face, clearly indicates that a summary of the invention is optional. In other words, 37 CFR § 1.73 and M.P.E.P. § 608.01(b) provide requirements with which a summary section should comply *if* such a section happens to be set forth in the specification, but do not require the inclusion of such a section in the first place.

Moreover, 37 C.F.R. § 1.77(c) confirms the optional nature of the summary section, stating that “the text of the specification sections defined in paragraphs (b)(1) through (b)(12) of this section, *if applicable*, should be preceded by a section heading in uppercase and without underlining or bold type” (emphasis added). The summary of the invention section is identified in paragraph (b)(7) of 37 C.F.R. § 1.77. Thus, it is clear that 37 C.F.R. § 1.77 is identifying a preferred heading arrangement of the brief summary of the invention section, if such a section is present, *but does not require the brief summary of the invention section to be included in the specification*.

Therefore, nothing in the USPTO’s own rules express a requirement that a summary of the invention be included in a patent application’s specification.

Accordingly, because the USPTO’s own rules clearly indicate that the summary of the invention is an optional requirement of a patent application, it is respectfully asserted that the objection to the specification under M.P.E.P. §

608.01(b) requiring a brief summary of the invention was improper.

Withdrawal of this objection, therefore, is respectfully requested.

Rejection of Claim 9-18 under 35 U.S.C. § 112

The Office action rejected claims 9-12 under 35 U.S.C. § 112 as being incomplete for omitting essential subject matter. In particular, the Office action rejected claim 9 for reciting a method of securely configuring a client, but failing to recite an element directed to configuring the client. Claim 9 has been amended to recite a method of securely conveying a configuration update to a client machine. Amended claim 9 also expressly recites sending the configuration update to the client. Therefore, it is respectfully submitted that claim 9, to the extent that it may have previously, does not omit any essential subject matter. Accordingly, withdrawal of the rejection of claim 9 and the claims depending therefrom under 35 U.S.C. § 112 is respectfully requested.

Rejection of Claims 1-8 based on the Cited Art

The Office action rejected pending independent claim 1 as being obvious in view of *Hind* (U.S. 6,976,163) under 35 U.S.C. § 103(a). Independent claim 1, as currently amended, recites a method of securely configuring a first machine in a pre-operating system environment comprising, *inter alia*, providing an attestation while the first machine is operating in the pre-operating system environment for use by a second machine to determine whether to send a configuration update to the first machine, and receiving the configuration update when the second machine determines that the attestation is authentic.

To establish a *prima facie* case of obviousness based on a combination of elements from the prior art, *each element* of the claim *must be found* in the cited prior art. See M.P.E.P. § 2143(A) (citing *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, ___, 82 USPQ2d 1385, 1395 (2007)). Additionally, it is well settled that, “[t]o support the conclusion that the claimed invention is directed to *obvious* subject matter, either the references must *expressly or impliedly suggest the claimed invention* or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.” M.P.E.P. § 706.02(j) (citing *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)) (emphasis added). Furthermore, “when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious.” See M.P.E.P. § 2143(A) (citing *KSR Intl. Co.*, 550 U.S. at ___, 82 USPQ2d at 1395).

Here, however, no prior art reference applied in the Office action expressly or impliedly suggests providing an attestation while a first machine is operating in the pre-operating system environment for use by a second machine to determine whether to send a configuration update to the first machine, much less receiving the configuration update when the second machine determines that the attestation is authentic. Nor does any convincing line of reasoning not based on hindsight lead one to such a method. Furthermore, the prior art reference relied upon in the Office action, as a whole, arguably teaches away from the recited method. Thus, claim 1, as amended, is nonobvious over the applied prior art.

For example, *Hind* describes various example techniques for obtaining and performing firmware updates of target devices. However, unlike the recitation of amended claim 1, all of *Hind's* examples expressly describe that the firmware update is to be provided to the target device without first requiring authentication of an attestation associated with the target device. Instead, any firmware update is simply made available to the target device and it is left up to the target device to check whether the firmware update is available for processing and to determine whether performing the update is authorized.

More specifically, the first operation performed in each of *Hind's* examples of FIGS. 5, 6 and 9 has a device checking on the availability of a firmware update, with the firmware update, therefore, being available, if at all, without first requiring authentication of any attestation associated with the target device. Additionally, in its example of FIG. 8, *Hind* also illustrates that certified firmware updates are to be distributed without first requiring authentication of any attestations associated with any recipients. Furthermore, in *Hind's* example of FIG. 11 cited in the Office action, firmware updates are also to be provided to the described generic devices without first authenticating any attestations associated with the generic devices (see e.g. *Hind*, col. 18, lines 45-46). Instead, each particular generic device is responsible for evaluating an authorization to determine whether the device is authorized to perform the update (see e.g. *Hind*, col. 18, lines 48-52).

Hind, therefore, clearly teaches providing firmware updates to target devices without first requiring any attestation or authentication, with the target devices being responsible for determining whether any available update

should be processed. Thus, *Hind* fails to fairly teach or suggest providing an attestation while a first machine is operating in the pre-operating system environment for use by a second machine *to determine whether to send a configuration update to the first machine*, and receiving the configuration update *when the second machine determines that the attestation is authentic*, as now recited in claim 1. Furthermore, *Hind's* unwavering description of example update techniques all involving making firmware updates available to target devices without first requiring any attestation or authentication arguably teaches away from amended claim 1's recited use of an attestation to be authenticated to determine whether to even send a configuration update to a machine, thereby further indicating amended claim 1 is nonobvious.

None of the other prior art applied in the Office action overcomes these deficiencies of *Hind* with respect to amended claim 1, thereby making amended claim 1 a nonobvious advance over the art of record.

Accordingly, because no prior art applied in the Office action expressly or impliedly suggests each element of amended claim 1, and because no convincing line of reasoning absent hindsight reference to the applicants' own disclosure could lead a person of ordinary skill in the art from the applied prior art to the recitation of amended claim 1, withdrawal of the rejection of claim 1 under 35 U.S.C § 103(a) is respectfully requested. In view of the foregoing, it is respectfully submitted that pending amended claim 1 and the claims depending therefrom are in condition for allowance and favorable reconsideration is respectfully requested.

Rejection of Claims 9-18 based on the Cited Art

The Office action rejected pending independent claim 9 as being obvious in view of *Hind* under 35 U.S.C. § 103(a). Independent claim 9, as currently amended, recites a method of securely conveying a configuration update to a client machine operating in a pre-operating system environment comprising, *inter alia*, sending a message to the client machine to determine whether the client machine supports receiving configuration updates from a remote source while the client machine is operating in the pre-operating system environment. However, amended independent claim 9 is directed to nonobvious subject matter over the art of record because no reference or combination of references applied in the Office action expressly or impliedly suggests each element of the claim.

As explained above, *Hind* describes various example techniques for obtaining and performing firmware updates of target devices, all of which universally involve providing firmware updates to target devices without first verifying any attestations associated with the target devices. Furthermore, nowhere does *Hind* fairly teach or suggest first sending a message to a client machine to determine whether the client machine supports receiving configuration updates from a remote source while the client machine is operating in the pre-operating system environment, as recited in amended claim 9. Instead, as described above, *Hind* simply makes firmware updates available to a target device, and then leaves it up to the target device to determine whether processing of any available updates is appropriate or authorized. None of the other prior art applied in the Office action overcomes

this deficiency of *Hind* with respect to amended claim 9, thereby making amended claim 9 a nonobvious advance over the art of record.

Furthermore, adapting any of *Hind's* examples to send a message as recited in amended claim 9 to first determine whether a client machine supports receiving configuration updates while operating in a pre-operating system environment would change *Hind's* principle of operation which has the firmware updates simply being made available without any prior action by a target device . As noted in the M.P.E.P., “[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.” M.P.E.P. § 2143.01(VI) (citing *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)). Furthermore, because all of *Hind's* examples simply make firmware updates available without requiring verification of any attestation and, instead, rely on the target device to determine whether and how to process available updates, there would be no reason or motivation to adapt any of *Hind's* examples to send the message to the client machine to determine whether the client machine supports receiving configuration updates.

Accordingly, because no prior art applied in the Office action expressly or impliedly suggests each element of amended claim 9, and because no convincing line of reasoning absent hindsight reference to the applicants' own disclosure could lead a person of ordinary skill in the art from the applied prior art to the recitation of amended claim 9, withdrawal of the rejection of claim 9 under 35 U.S.C § 103(a) is respectfully requested. In view of the foregoing, it is respectfully submitted that pending amended claim 9 and the

claims depending therefrom are in condition for allowance and favorable reconsideration is respectfully requested.

Rejection of Claims 19-25 based on the Cited Art

The Office action rejected pending independent claim 19 as being obvious in view of *Hind* under 35 U.S.C. § 103(a). Independent claim 19, as currently amended, recites an apparatus to securely configure a client machine in a pre-operating system environment comprising, *inter alia*, a trusted platform module configured to provide an attestation while the client machine is operating in the pre-operating system environment for use by a server machine to determine whether to send a client configuration update to the client machine, and a second messaging module for use in sending a message to the client machine to determine whether the client machine supports receiving configuration updates from the server machine while operating in the pre-operating system environment. However, amended independent claim 19 is directed to nonobvious subject matter over the art of record because no reference or combination of references applied in the Office action expressly or impliedly suggests each element of the claim.

As explained above in connection with the rejection of claim 1, neither *Hind* nor any other applied reference fairly describes or suggests the trusted platform module configured to provide the attestation for use by the server machine to determine whether to send the configuration update to the client machine. Additionally, as explained above in connection with the rejection of claim 9, neither *Hind* nor any other applied prior art reference fairly describes or suggests the second messaging module for use in sending the message to the client machine to determine whether the client machine supports receiving

configuration updates from the server machine while operating in the pre-operating system environment. Instead, as described above, all of *Hind's* examples simply make firmware updates available to target devices without requiring verification of any attestations and, instead, rely on the target devices to determine whether processing of any available updates is appropriate or authorized.

Accordingly, because no prior art applied in the Office action expressly or impliedly suggests each element of amended claim 19, and because no convincing line of reasoning absent hindsight reference to the applicants' own disclosure could lead a person of ordinary skill in the art from the applied prior art to the recitation of amended claim 19, withdrawal of the rejection of claim 19 under 35 U.S.C. § 103(a) is respectfully requested. In view of the foregoing, it is respectfully submitted that pending amended claim 19 and the claims depending therefrom are in condition for allowance and favorable reconsideration is respectfully requested.

Rejection of Claims 26-28 based on the Cited Art

The Office action rejected pending independent claim 26 as being obvious in view of *Hind* under 35 U.S.C. § 103(a). Independent claim 26, as currently amended, recites machine readable medium having instructions stored thereon that, when executed, cause a machine to, *inter alia*, provide an attestation while the machine is operating in a pre-operating system environment for use by a server to determine whether to send the configuration update to the machine. However, amended independent claim 26 is directed to nonobvious subject matter over the art of record because no

reference or combination of references applied in the Office action expressly or impliedly suggests each element of the claim.

As explained above in connection with the rejection of claim 1, neither *Hind* nor any other applied prior art reference fairly describes or suggests providing the attestation for use by the server to determine whether to send the configuration update to the machine. Instead, as described above, all of *Hind's* examples simply make firmware updates available to target devices without requiring authentication of any attestations and, instead, rely on the target devices to determine whether processing of any available updates is appropriate or authorized.

Accordingly, because no prior art applied in the Office action expressly or impliedly suggests each element of amended claim 26, and because no convincing line of reasoning absent hindsight reference to the applicants' own disclosure could lead a person of ordinary skill in the art from the applied prior art to the recitation of amended claim 26, withdrawal of the rejection of claim 26 under 35 U.S.C. § 103(a) is respectfully requested. In view of the foregoing, it is respectfully submitted that pending amended claim 26 and the claims depending therefrom are in condition for allowance and favorable reconsideration is respectfully requested.

Rejection of Claims 29-32 based on the Cited Art

The Office action rejected pending independent claim 29 as being obvious in view of *Hind* under 35 U.S.C. § 103(a). Independent claim 29, as currently amended, recites machine readable medium having instructions stored thereon that, when executed, cause a machine to, *inter alia*, send a message to a client machine to determine whether the client machine supports

receiving configuration updates from a remote source while the client machine is operating in a pre-operating system environment. However, amended independent claim 29 is directed to nonobvious subject matter over the art of record because no reference or combination of references applied in the Office action expressly or impliedly suggests each element of the claim.

As explained above in connection with the rejection of claim 9, neither *Hind* nor any other applied prior art reference fairly describes or suggests sending the message to the client machine to determine whether the client machine supports receiving configuration updates from the remote source while operating in the pre-operating system environment. Instead, as described above, all of *Hind's* examples simply make firmware updates available to target devices without requiring verification of any attestations and, instead, rely on the target devices to determine whether processing of any available updates is appropriate or authorized.

Accordingly, because no prior art applied in the Office action expressly or impliedly suggests each element of amended claim 29, and because no convincing line of reasoning absent hindsight reference to the applicants' own disclosure could lead a person of ordinary skill in the art from the applied prior art to the recitation of amended claim 29, withdrawal of the rejection of claim 29 under 35 U.S.C § 103(a) is respectfully requested. In view of the foregoing, it is respectfully submitted that pending amended claim 29 and the claims depending therefrom are in condition for allowance and favorable reconsideration is respectfully requested.

If the examiner is of the opinion that a telephone conference would expedite the prosecution of this case, the examiner is invited to contact the undersigned at the number identified below.

Respectfully submitted,

HANLEY, FLIGHT & ZIMMERMAN, LLC.
Suite 2100
150 South Wacker Drive
Chicago, Illinois 60606
(312) 580-1020

By: /Michael W. Zimmerman/
Michael W. Zimmerman
Registration No. 57,993
Agent for Applicant(s)

Date: August 20, 2008